

with a history of recurrent hospitalizations. Interventions targeted at preventing HF hospitalizations would be beneficial.

PCV97

FOLLOW UP COST OF PATIENTS SUBJECTED TO CRMD IN GREECE

Fanourgiakis J¹, Simantirakis E¹, Kanoupakis E¹, Chrysostomakis S¹, Maniadas N², Kourlaba G³, Vardas P¹

¹University of Crete, Heraklion, Greece, ²National School of Public Health, Athens, Greece,

³National and Kapodistrian University of Athens School of Medicine, Athens, Greece

OBJECTIVES: The objective of the study is to estimate the follow up cost and its components in patients subjected to pacemaker (PM) and implantable cardioverter-defibrillator (ICD) implantation. **METHODS:** A single-center, prospective, study which was conducted for one year's period. In total, 464 consecutive patients were recruited (370 were subjected to PM implantation, from which 240 initials, 130 replacements and 94 to ICD implantation, from which 80 initials, 14 replacements). Resource data were assessed at patients' enrolment in the study and at 6th and 12th months of patients' follow-up. Then, the annual patients' follow up costs were calculated using the bottom-up approach. **RESULTS:** The annual follow up cost for the patients who were subjected to PM implantation (initial or replacement) was found to be: The mean direct health care cost (outpatient visits, hospitalizations, medication use and the cost of laboratory and imaging diagnostic examinations) was €1.386 (€1.069-€1.962). The mean direct non-health care cost was €359 (€207-€551). Finally the mean indirect cost was €71 (€70-€72). The mean (95% confidence interval) total annual follow-up cost for the patients who were subjected to PM implantation was € 1.816 (€ 1.433- € 2.421). The annual follow up cost for the patients were subjected to ICD implantation (initial or replacement) was found to be: The mean direct health care cost (outpatient visits, hospitalizations, medication use and the cost of laboratory and imaging diagnostic examinations) was 2.279 (1743-3.081). The mean direct non-health care costs was €173 (€11-€386). Finally the mean indirect cost was €367 (€72-€802). The mean (95% confidence interval) total annual follow-up cost for the patients who were subjected to ICD implantation was € 2.819 (€ 2.115-€ 3.703). **CONCLUSIONS:** The study provides unique data regarding the follow up cost and its separate components of patients with CRMDs in Greece. Moreover the findings indicate a low annual follow-up cost.

PCV98

REAL-WORLD HEALTH CARE RESOURCE UTILISATION AMONG PATIENTS WITH CHRONIC HEART FAILURE: A CANADIAN ASSESSMENT

Petrella RJ¹, Liu P², Chiva-Razavi S³, Deschaseaux C⁴, Sagkriotis A⁴

¹Lawson Health Research Institute, London, ON, Canada, ²University of Ottawa, ON, Canada,

³Novartis Pharmaceuticals Canada Inc., Dorval, QC, Canada, ⁴Novartis Pharma AG, Basel, Switzerland

OBJECTIVES: Limited evidence exists on the burden of chronic heart failure (CHF) in terms of reduced vs. preserved ejection fraction (HFREF vs. HFPEF) and NYHA classification. This study aims to determine health care resource utilization associated with CHF, both for HFREF (≥45%) and HFPEF (<40%) and according to NYHA class. **METHODS:** Retrospective analysis of a longitudinal population-based medical records database from southwestern Ontario was conducted. Records contain chart-abstracted information such as diagnosis, physician visits and consultation notes. Data of adult patients with CHF diagnosed between Jan 1st, 2005 and Sept 31st, 2012 with at least 1 year follow-up were included. Health care resources consumed by patients were identified in terms of hospitalizations, physician and emergency room visits and medical procedures. Data reported as mean values. **RESULTS:** Records of 8,983 patients were included: 39% with HFREF, 49% with HFPEF and 12% with an ejection fraction between 40-45%. The median follow-up duration was 51.6 months. Most patients were in NYHA class II (30%) or class III (34%) followed by class I (22%) and class IV (14%). In comparison to the HFPEF cohort, total hospitalizations (3.0 vs. 4.2); including CHF hospitalizations (1.6 vs. 1.9), ER visits (2.1 vs. 3.1), GP visits (5.5 vs. 6.1), specialist visits (3.0 vs. 3.2), lab tests (5.8 vs. 7.7) and medical procedures (3.9 vs. 4.1) were numerically higher for the HFREF cohort. Among patients in NYHA class II-IV (N=7006), hospitalizations (total: 4.5; CHF-related: 2.1) and lab tests (7.7) were numerically higher for class IV patients as was the frequency of GP visits (7.1) for class III patients. ER and specialist visits and medical procedures were similar across all NYHA classes. **CONCLUSIONS:** In a real-world Canadian setting, patients with HFREF and those in NYHA class III-IV seem to experience greater resource use which is consistent with the existing literature.

PCV99

PROCEDURE (IMPLANTATION) COST AND TOTAL HOSPITALIZATION COST OF PATIENTS SUBJECTED TO CARDIAC RHYTHM MANAGEMENT DEVICES IMPLANTATION: RESULTS FROM A SINGLE TERTIARY CENTRE

Fanourgiakis J¹, Simantirakis E¹, Kanoupakis E¹, Chrysostomakis S¹, Maniadas N², Kourlaba G³, Vardas P¹

¹University of Crete, Heraklion, Greece, ²National School of Public Health, Athens, Greece,

³National and Kapodistrian University of Athens School of Medicine, Athens, Greece

OBJECTIVES: The objective of the present study is to estimate the procedure (or implantation) cost, which includes: the human resources cost, the implant and the supplies cost and the total hospitalization cost which includes: the procedure cost, the hospitalization cost, the laboratory and imaging diagnostic examination cost and the indirect cost, in patients subjected to pacemaker (PM) and implantable cardioverter-defibrillator (ICD) implantation. **METHODS:** A single-centre, prospective study was conducted for one year's period. In total, 464 consecutive patients were recruited (370 were subjected to PM implantation initial or replacement and 94 to ICD implantation initial or replacement). Resource data were assessed at patients' enrolment in the study as well as during the procedure of implantation. Then, the components of the procedure cost and total hospitalization cost were calculated using the bottom-up approach. **RESULTS:** The mean (95% confidence interval) procedure cost of PM and ICD implantation (including the costs of devices, electrodes, other supplies, and personnel's time) was calculated to be €1.803 (€1.758-€1.858) and

€13.521 (€ 13.153-€13.892), respectively. The mean total hospitalization cost (including procedure cost, hospitalization cost, cost of laboratory and imaging diagnostic examinations and the indirect cost attributed to productivity lost due to patient's hospitalization) was €3.926 (€3.711-€4.167) for PM and €17.764 (€16.852-€18.692) for ICD. **CONCLUSIONS:** These data revealed that although these devices are associated with a relatively high upfront cost, the total implantation cost for the society is relatively low compared with other countries. Therefore, implantation of such devices should be encouraged since these devices reduce the morbidity and mortality without a high economic burden to society.

CARDIOVASCULAR DISORDERS – Patient-Reported Outcomes & Patient Preference Studies

PCV100

IMPACT OF PROVIDER MAILINGS ON MEDICATION ADHERENCE IN MEDICARE PART D MEMBERS

Qiu Y¹, Borah BJ², Gleason P¹

¹Prime Therapeutics LLC, Eagan, MN, USA, ²Mayo Clinic, Rochester, MN, USA

OBJECTIVES: Medication non-adherence is associated with worsening health outcomes and higher medical costs. This study assessed the impact of a prescriber mailing intervention on adherence among 802,355 members enrolled in Medicare Part D prescription drug plans offered by a pharmacy benefit manager. **METHODS:** Non-adherent members in three drug classes – oral antidiabetics, statins and one class of antihypertensives (RAS antagonists) – were identified if their specific drug class proportion of days covered (PDC) was < 80% in a 12-month baseline period (2010Q4-2011Q3). Letters were mailed to their prescribers suggesting they discuss potential adherence barriers with their patients. Post-mailing PDC was calculated during a 12-month follow-up period after the mailing date. Members were included if they were age 18+, had 2 or more fills within the drug class, and were continuously enrolled in the prescription drug plan during the baseline and follow-up periods. A historical control cohort was constructed using the same eligibility criteria as applied to the intervention cohort but no letter was mailed to the prescribing physicians. Multivariate logistic regression was used to model post-mailing adherence (PDC≥80%), adjusting for age, gender, zip code level income, education and race variables. Analyses were conducted separately for each drug class. **RESULTS:** Final analyzable members included 21,044 (Intervention=10,707; Control=10,337) for antidiabetics, 106,829 (Intervention=53,957; Control=52,872) for statins, and 73,560 (Intervention=36,706; Control=36,854) for RAS antagonists. The baseline PDCs between the intervention and control cohorts were not statistically different for all the three drug cohorts. Adjusted logistic regression results indicate the prescriber mailing was associated with significant adherence improvement, odds ratio (OR) 1.11 (95% confidence interval [CI], 1.05-1.18), OR 1.16 (95% CI, 1.13-1.19), and OR 1.07 (95% CI, 1.03-1.10) within the antidiabetic, statin and RAS antagonist drug classes, respectively. **CONCLUSIONS:** Health plans should consider utilizing prescriber mailings in efforts to improve medication adherence for chronic diseases.

PCV101

DRUG COMPLIANCE AMONG HYPERTENSIVE PATIENTS: A QUESTIONNAIRE BASED STUDY CONDUCTED IN A TERTIARY CARE HOSPITAL IN PAKISTAN

Ahmad M, Bukhari SA, Pervaiz F, Akhtar M

The Islamia University of Bahawalpur, Bahawalpur, Pakistan

OBJECTIVES: To analyze patient compliance towards their prescribed medication and to evaluate the patient knowledge regarding use of drugs. **METHODS:** The study was conducted in a tertiary care hospital in Pakistan. A random sample of 200 patients was selected. The questionnaire was administered by trained interviewers in the Urdu language for ease of understanding by the patient. The questionnaire extracted information regarding patient demographics, life style (smoking, drinking, physical activities), awareness about and characteristics of hypertension and anti-hypertensive treatment and factors that, in the patient's views, encouraged or discouraged the patient's drug taking behavior. **RESULTS:** According to analysis, 81% patients were from urban areas and 19% patients were from rural areas. Most (71%) of the patients belonged to the age group of 40-50 years. Majority of the affected persons were male i.e. 70%, whereas females were 30%. The patients with history of CVS disorders in their families were 36%. It was found that 36% of the patients were smokers, 2% were drinkers and 75% had no physical activity in routine. The patients went for regular follow up of their blood pressure were 38.5% and 53% of the patients had regular lab tests during their treatment. It was found that 74.5% of patients used to take medication on time while 64% stopped their medication when they felt better. The major reason (27.5%) for not taking medication was found to be the use of alternative medicines while 60% patients tried to clarify their doubts about therapy. Majority of patients (81.5%) followed precautionary measures, 21% patients used different reminders and 30.5% patients had difficulty in taking their medication. On felling worse 40% of the patients stopped taking medication. **CONCLUSIONS:** There is need for educational intervention and patient counseling to understand the importance of compliance for this disease.

PCV102

COMPARISON OF EXFORGE HCT SINGLE PILL COMBINATION AND AMLODIPINE/ VALSARTAN/HYDROCHLOROTHAZIDE FREE COMBINATION: ADHERENCE AND PERSISTENCE

Machnicki G¹, Ong SH², Chen W³, Wei Z³, Kahler K⁴

¹Novartis Argentina SA, Buenos Aires, Argentina, ²Novartis Pharma AG, Basel, Switzerland,

³Novartis Pharma Co. Ltd, Shanghai, China, ⁴Novartis Pharmaceuticals Corporation, East Hanover, NJ, USA

OBJECTIVES: Single pill combinations (SPC) are associated with improved adherence and persistence in hypertensive (HTN) populations. The evidence is not available for three drug SPC Exforge HCT. This study investigated if Exforge HCT is associated with improved 12-month persistence and adherence in adult hyper-